



Memorandum

To: Bassett Creek Watershed Management Commission
From: Barr Engineering Co. and Laura Jester, BCWMC Administrator
Subject: Item 5C– Consider Approval of Budget Amendment for Engineering Services for Bryn Mawr Meadows Water Quality Project (2020 CIP Project BC-5)
BCWMC March 16, 2023 Meeting Agenda
Date: March 6, 2023

5C. Consider Approval of Budget Amendment for Engineering Services for Bryn Mawr Meadows Water Quality Project (2020 CIP Project BC-5)

Recommendations:

1. Consider amending the August 2022 engineering services scope to increase the approved budget by \$26,300.

Background

The BCWMC's [Bryn Mawr Meadows Water Quality Improvement Project](#) will treat stormwater runoff from 45 acres of residential land that currently flows untreated into Bassett Creek. The project was designed and is being constructed in conjunction with the redevelopment of Bryn Mawr Meadows Park by the Minneapolis Park and Recreation Board (MPRB). The City of Minneapolis (City) is also involved in this project as some improvements to stormwater infrastructure will be constructed within city right-of-way.

The BCWMC approved an amendment to the original Water Quality Improvement Project budget at their August 2022 meeting, increasing the approved construction funding amount to \$1,725,000 and increasing the associated engineering services budget to \$260,000. Construction of the Bryn Mawr Meadows Park redevelopment and the BCWMC's Water Quality Improvement Project began in November of 2022. Construction activities are expected to extend through October of 2023.

Status of Project Budgets

The BCWMC-approved overall budget for the Water Quality Improvement Project is \$1,985,000, with an expected construction cost of \$1,725,000 and engineering services fees of \$260,000.

The Water Quality Improvement Project has advanced through the first several phases of construction. Rough grading of the site, installation of structural piles, and installation of the majority of in-park storm sewer is now complete. Environmental work associated with the testing and screening of contaminated soils within the project area and oversight of the removal and disposal of contaminated materials is also largely complete.

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Construction quantities and costs associated with the hauling and disposal of contaminated materials from the site are lower than what we conservatively planned for within the project bid. This was due, in part, to the environmental testing and screening work that we performed preceding construction of the stormwater ponds, which led to a more refined understanding of the extent of contaminated material on the site. This additional information allowed us to work with the contractor to minimize the amount of excavated material that needed to be removed and disposed of from the site, while ensuring environmental regulations were being met. Construction quantities associated with the hauling and disposal of non-contaminated materials from the site are also lower than we planned for within the construction bid, due to coordination with the MPRB and their consultant, and the MPRB's ability to use this material on-site as fill for the concurrent park redevelopment project. Based on construction quantities submitted in early February 2023, we estimate that the construction cost savings (actuals vs. what was planned for) could be on the order of \$400,000 for these items.

While there are expected significant savings on the construction side of the budget, there are anticipated budget shortfalls on the engineering services side. The original engineering services contract for the Water Quality Improvement Project included several assumptions regarding the amount of construction services that Barr would need to provide as part of the project. Our original assumptions included a set number of hours for construction coordination with the contractor, project partners, and on-site observations. These assumptions were developed based on the best information available at the time of scope development and before the final project design was completed. The final Water Quality Improvement Project design included structural piles, which require more time for construction coordination and observation than for other construction activities to ensure compliance with project specifications. Project coordination on design adjustments also required more time.

The original scope of work also assumed that any needed design adjustments would be limited in scale and scope. To date, the project has required two design change orders due to the existing storm sewer pipes on the northern edge of the Water Quality Improvement Project being at a slightly different location and different elevation than was originally planned for in the project design.

One of the storm sewer elevation differences identified by the contractor during the course of construction triggered a request from the City for the BCWMC to include the removal and replacement of an existing 36-inch pipe within the design and construction administration work of the Water Quality Improvement Project. The City made this request to take advantage of the Commission Engineer's work that was already underway to make adjustments to the plan sheets for the Water Quality Improvement Project within this area and take advantage of the opportunity to replace this aging pipe as part of the other in-park storm sewer system upgrades.

Estimated costs for the remaining construction administration, observation, and development of project as-builts for the Water Quality Improvement Project are noted in the table below. Also noted are the estimated design and construction administration costs associated with the addition of the 36-inch pipe to the Water Quality Improvement Project requested by the City. We also included a new budget item

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request (Design Change Order / Coordination) to address any additional, necessary design modifications that may arise over the remaining portion of the project. This budget will only be used if changes are required to the original design due to actual conditions in the field being different than what was planned for in the original design, requiring the design to be modified and a change order issued.

| Budget Item | Additional Estimated Costs |
|--|-----------------------------------|
| Construction services for remaining Bryn Mawr Water Quality Improvement Project items | \$16,500 |
| Design and construction administration costs associated with addition of 36-inch pipe on behalf of the City ¹ | \$3,800 |
| Design change order / coordination (if needed) | \$6,000 |
| Total additional budget request | \$26,300 |
| Previous approved amended budget | \$260,000 |
| Total requested engineering services budget | \$286,300 |

¹ The BCWMC Administrator approved the addition of this item to the Bryn Mawr Water Quality Improvement Project scope to allow the Commission Engineer to provide timely direction to the contractor regarding the associated changes and to not the impede progress of construction activities at the site. The Administrator received verbal agreement from the City that the BCWMC will be reimbursed for this work.